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METHOD AND DEVICE FOR PRODUCING TUBULAR FORMED BODY

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TECHNICAL FIELD

[0001] The present invention relates to a method and device for producing a tubular formed body. More specifically, the present invention relates to a method and device for producing a tubular formed body which make it possible to form a tubular formed body such as an annular shell of a run-flat support body and a wheel rim without causing wrinkles and ruptures even when a metal material having a large breaking stress is used for a blank.

## BACKGROUND ART

[0002] Fig. 8 illustrates one example of a known run-flat tire/wheel assembly. A run-flat support body 32 is attached to the inside of a pneumatic tire 31 mounted on a wheel rim 30. The run-flat support body 32 is configured by attaching elastic rings 34, 34 such as rubber to both leg end portions of an annular shell 33. The annular shell 33 is formed so that two ridge portions 33a, 33a are extended in the circumferential direction in the outer periphery.

[0003] Tubular formed bodies such as the wheel rim and the annular shell constituting the tire/wheel assembly as described above are generally made of metal because they need large strengths. As production methods thereof, casting and sheet-metal working are known. However, the former, casting, takes a long time from the injection of melted metal into a mold to the detaching of the metal from the mold, and therefore has the disadvantage that productivity is low compared to that of the latter, sheet-metal working.

[0004] Patent Document 1 discloses a method of forming a metal plate into a wheel rim. In this forming method, using a tubular blank obtained by